

ARRANGEMENT
BETWEEN
THE UNITED STATES NUCLEAR REGULATORY COMMISSION
(U.S.N.R.C.)
AND
THE ISRAEL ATOMIC ENERGY COMMISSION
(I.A.E.C.)
FOR THE EXCHANGE OF TECHNICAL INFORMATION
AND
COOPERATION IN NUCLEAR SAFETY AND RESEARCH MATTERS

The United States Nuclear Regulatory Commission (hereinafter called the U.S.N.R.C.) and the Israel Atomic Energy Commission (hereinafter called the I.A.E.C.);

Having a mutual interest in a continuing exchange of information pertaining to regulatory matters and of standards required or recommended by their organizations for the regulation of safety and environmental impact of nuclear facilities;

Having similarly cooperated under the terms of a five-year Arrangement for the exchange of technical information and cooperation in nuclear safety matters, originally signed at Bethesda May 9 and at Tel Aviv May 19, 1978, such Arrangement including provision for its extension as mutually agreed upon by the parties;

Having already renewed such Arrangement for five-year periods on April 11, 1983, July 11, 1988, July 30, 1993, and September 23, 1998; and

Having indicated their mutual desire to continue the cooperation so established for another five years;

Have agreed as follows:

I. SCOPE OF THE ARRANGEMENT

I.1 Technical Information Exchange

To the extent that the U.S.N.R.C. and the I.A.E.C. are permitted to do so under the laws, regulations, international nuclear non-proliferation commitments, and policy directives of their respective countries, the parties will continue the exchange of technical information relating to the regulation of safety, safeguards, waste management, and environmental impact of designated nuclear facilities. The following types of technical information may be exchanged, on the understanding that the U.S.N.R.C. may lawfully provide to the I.A.E.C. only information that is available to the general public.

- a. Topical reports concerning safety, safeguards, waste management, and environmental effects written by or for one of the parties as a basis for, or in support of, regulatory decisions and policies.

- b. Documents relating to significant licensing actions and safety and environmental decisions affecting nuclear facilities. These may include, but are not limited to, documents relating to site licensing principles and problems, with specific emphasis on principles and guidelines for site safety evaluations regarding
 - (1) the proximity of capable faulting,
 - (2) the proximity of a potential earthquake focus, and
 - (3) the site response to a nearby earthquake;and principles and guidelines for using probabilities in safety evaluations of
 - (1) seismic and tectonic events,
 - (2) tsunamis and like phenomena, and
 - (3) meteorological and hydrological phenomena.

- c. Detailed documents describing the U.S.N.R.C. process for licensing and regulating certain U.S. facilities designated by the I.A.E.C. as similar to certain facilities being built or planned in Israel and equivalent documents on such Israeli facilities.
- d. Information in the field of reactor safety research which the parties have the right to disclose, either in the possession of one of the parties or available to it, including light water reactor safety information from the technical areas described in Addenda "A" and "B", attached hereto and made a part hereof. Cooperation in these itemized research areas may require a separate agreement, as determined to be necessary by the research organizations of one or both of the parties. Each party will transmit to the other urgent information concerning research results that require early attention in the interest of public safety, along with an indication of significant implications.
- e. Reports on operating experience, such as reports on nuclear incidents, accidents and shutdowns, and compilations of historical reliability data on components and systems.
- f. Regulatory procedures for the safety, safeguards, waste management, and environmental impact evaluation of nuclear facilities.
- g. Early advice of important events, such as serious operating incidents and government-directed reactor shutdowns that are of immediate interest to the parties.
- h. Copies of regulatory standards required to be used, or proposed for use by the regulatory organizations of the parties.

I.2 Cooperation in Safety Research

The execution of joint programs and projects of safety research and development, or those programs and projects under which activities are divided between the two parties, including the use of test facilities and/or computer programs owned by either party, will be agreed upon on a case-by-case basis and may be the subject of a separate agreement, as determined to be necessary by one or both of the parties. Other times, it may be accomplished by an exchange of letters between the parties, subject at least to the terms and conditions of the present agreement. Technical areas specified by such exchanges of letters may be modified subsequently by mutual consent. Temporary assignments of personnel by one party in the other party's agency will also be considered on a case-by-case basis.

I.3 Training and Assignments

Within the limits of available resources and subject to the availability of appropriated funds, the U.S.N.R.C. will try to assist the I.A.E.C. in providing certain training and experience for I.A.E.C. safety personnel. Costs of salary, allowances, and travel of I.A.E.C. participants will be paid by the I.A.E.C. The following are typical of the categories of such training and experience that may be provided:

1. Participation by I.A.E.C. employees in U.S.N.R.C. staff training courses.
- b. Assignment of I.A.E.C. experts for 6-24 month periods within the U.S.N.R.C. staff to work on U.S.N.R.C. staff duties and gain on-the-job experience.

I.4 Additional Safety Advice

To the extent that the documents and other information provided by the U.S.N.R.C. as described in SCOPE OF THE ARRANGEMENT, above, are not adequate to meet I.A.E.C. needs for technical advice, the parties will consult on the best means for fulfilling such needs. The U.S.N.R.C. will attempt, within the limitations of appropriated resources and legislative authority, to assist the I.A.E.C. in meeting its needs. For example, within these limitations, the U.S.N.R.C. will attempt to meet requests that come through the International Atomic Energy Agency (IAEA) for technical assistance missions to Israel by U.S.N.R.C. safety experts.

1.5 Limitations

Information provided to Israel under this Arrangement is provided for use in operation of safeguarded facilities and will be used for that purpose.

II. ADMINISTRATION

- a. The exchange of information under this Arrangement will be accomplished through letters, reports, and other documents, and by visits and meetings arranged in advance on a case-by-case basis. A meeting will be held annually, or at such other times as mutually agreed, to review the exchange of information and cooperation under this Arrangement, to recommend revisions to the Arrangement, and to discuss topics coming within the scope of the cooperation. The time, place, and agenda for such meetings will be agreed upon in advance. Visits which take place under the Arrangement, including their schedules, will have the prior approval of the two administrators referred to in paragraph II.b.
- b. An administrator will be designated by each party to coordinate its participation in the overall exchange. The administrators will be the recipients of all documents

transmitted under the exchange, including copies of all letters unless otherwise agreed. Within the terms of the exchange, the administrators will be responsible for developing the scope of the exchange, including agreement on the designation of the nuclear energy facilities subject to the exchange, and on specific documents and standards to be exchanged. One or more technical coordinators may be appointed as direct contacts for specific disciplinary areas. These technical coordinators will assure that both administrators receive copies of all transmittals. These detailed arrangements are intended to assure, among other things, that a reasonably balanced exchange giving access to equivalent available information is achieved and maintained.

- c. The administrators will determine the number of copies to be provided of the documents exchanged. Each document will be accompanied by an abstract in English, 250 words or less, describing its scope and content.
- d. The application or use of any information exchanged or transferred between parties under this Arrangement will be the responsibility of the receiving party, and the transmitting party does not warrant the suitability of such information for any particular use or application.
- e. Recognizing that some information of the type covered in this Arrangement is not available within the agencies which are parties to this Arrangement, but is available from other agencies of the Governments of the parties, each party will assist the other to the maximum extent possible by organizing visits and directing inquiries concerning such information to appropriate agencies of its Government. The foregoing will not constitute a commitment of other agencies to furnish such information or to receive such visitors.
- f. Nothing contained in this Arrangement will require either party to take any action, which would be inconsistent with its existing laws, regulations, and policy directives. No nuclear information related to proliferation-sensitive technologies

will be exchanged under this Arrangement. Should any conflict arise between the terms of this Arrangement and those laws, regulations, and policy directives, the parties agree to consult before any action is taken.

- g. Any dispute or questions between the parties concerning the interpretation or application of this arrangement arising during its term will be settled by mutual agreement of the parties.
- h. Unless otherwise agreed, all costs resulting from cooperation pursuant to the Arrangement will be the responsibility of the party that incurs them. The ability of the parties to carry out their obligations is subject to the appropriation of funds by the appropriate governmental authority and to laws and regulations applicable to the parties.

III. EXCHANGE AND USE OF INFORMATION

- 1. The parties support the widest possible dissemination of information provided or exchanged under this Arrangement, subject to the provisions of the Intellectual Property Addendum, which is an integral part of this Arrangement.
- b. For the purposes of this Arrangement, the term "information" means nuclear energy-related regulatory, safety, safeguards, waste management, scientific, or technical data, results or methods of research and development, and any other knowledge intended to be provided or exchanged under this Arrangement.

IV. DURATION

- a. This Arrangement will enter into force upon signature and, subject to paragraph b. of this Article, will remain in force for a period of five years. It may be extended for a further period of time by written agreement of the parties.

- b. Either party may terminate this Arrangement after providing the other party written notice 180 days prior to its intended date of termination.

DONE at Rockville, Maryland, this 7TH day of April 2005, in duplicate, in the English language.

FOR THE UNITED STATES NUCLEAR
REGULATORY COMMISSION



Nils J. Diaz, Chairman

FOR THE ISRAEL ATOMIC ENERGY
COMMISSION:



Gideon Frank, Director General

Addendum "A"

U.S.N.R.C.-I.A.E.C. Reactor Safety Research Exchange
Areas in Which the U.S.N.R.C. Is Performing LWR Safety Research

1. Reactor Vessel and Piping Integrity
2. Aging of Reactor Components
3. Reactor Equipment Qualification
4. Thermal Hydraulic Code Applications and Maintenance
5. Plant Performance
6. Human Performance
7. Core Melt and Reactor Coolant System Failure
8. Reactor Containment Safety
9. Containment Structural Integrity
10. Seismic Safety
11. Probabilistic Risk Assessment
12. Severe Accident Analysis
13. Radiation Protection and Health Effects
14. Radionuclide Transport and Waste Management
15. Nuclear Fuel Analysis
16. Dry Cask Storage and Transport
17. Decommissioning

Addendum "B"

U.S.N.R.C.-I.A.E.C. Safety Research

Areas in Which the I.A.E.C. Is Performing Research

1. Methods and Criteria for Assessment of the Safety of Research Reactors
2. Seismic Risk Assessment
3. Safety and Security of Radioactive Sources
4. Vulnerability of Nuclear Facilities to External Events
5. Probabilistic Risk Assessment and Accident Management
6. Health Physics and Radiation Protection
7. Regulatory Activities Related to Radiation Protection

INTELLECTUAL PROPERTY ADDENDUM

Pursuant to Article III. of this Arrangement:

The Parties shall ensure adequate and effective protection of intellectual property created or furnished under this Arrangement and relevant implementing arrangements. The Parties agree to notify one another in a timely fashion of any inventions or copyrighted works arising under this Arrangement and to seek protection for such intellectual property in a timely fashion. Rights to such intellectual property shall be allocated as provided in this Addendum.

I. SCOPE

1. This Addendum is applicable to all cooperative activities undertaken pursuant to this Arrangement, except as otherwise specifically agreed by the Parties or their designees.
2. For purposes of this Arrangement, "intellectual property" shall have the meaning found in Article 2 of the Convention Establishing the World Intellectual Property Organization, done at Stockholm, July 14, 1967; viz., " 'intellectual property' shall include the rights relating to:
 - literary, artistic and scientific works,
 - performances of artists, phonograms, and broadcasts,
 - inventions in all fields of human endeavor,
 - scientific discoveries,
 - industrial designs,
 - trademarks, service marks, and commercial names and designations,
 - protection against unfair competition,and all other rights resulting from intellectual activity in the industrial, scientific, literary, or artistic fields."
3. This Addendum addresses the allocation of rights, interests, and royalties between the Parties. Each Party shall ensure that the other Party can obtain rights to intellectual property allocated in accordance with the Addendum by obtaining those rights from its own participants through contracts or other legal means, if necessary. This Addendum does not otherwise alter or prejudice the allocation between a Party and its nationals, which shall be determined by that Party's laws and practices.
4. Disputes concerning intellectual property arising under this Arrangement should be resolved through discussions between the concerned participating institutions or, if necessary, the Parties or their designees. Upon mutual agreement of the Parties, a dispute shall be submitted to an arbitral tribunal for binding arbitration

in accordance with the applicable rules of international law. Unless the Parties or their designees agree otherwise in writing, the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL) shall govern.

5. Termination or expiration of this Arrangement shall not affect rights or obligations under this Addendum.

II. ALLOCATION OF RIGHTS

1. Each party shall be entitled to a non-exclusive, irrevocable, royalty-free license in all countries to translate, reproduce, and publicly distribute scientific and technical journal articles, reports, and books directly arising from cooperation under this Arrangement. All publicly distributed copies of copyrighted work prepared under this provision shall indicate the names of the authors of the work unless an author explicitly declines to be named.
2. Rights to all forms of intellectual property, other than those rights described in Section II.1., above, shall be allocated as follows:
 - a. Visiting researchers, for example, scientists visiting primarily in furtherance of their education, shall receive intellectual property rights under the policies of the host institution. In addition, each visiting researcher named as an inventor shall be entitled to share in a portion of any royalties earned by the host institution from the licensing of such intellectual property.
 - b.
 - (1) For intellectual property created during joint research, for example, when the Parties, participating institutions, or participating personnel have agreed in advance on the scope of work, each Party shall be entitled to obtain all rights and interests in its own country. The Party in whose country the invention was made shall have first option to acquire all rights and interests in third countries. If research is not designated as "joint research", rights to intellectual property arising from the research will be allocated in accordance with paragraph II.2.a., above. In addition, each person named as an inventor shall be entitled to share in a portion of any royalties earned by either institution from the licensing of the property.
 - (2) Notwithstanding paragraph II.2.b. (1), above, if a type of intellectual property is available under the laws of one Party but not the other Party, the Party whose laws provide for this type of protection shall be entitled to all rights and interests worldwide. Persons named as inventors of the property shall nonetheless be entitled to royalties as provided in paragraph II.2.b. (1), above.